

# HVR312 - HVR320

**PRV : 1200 - 2000 Volts**

**Io : 3.0 Amperes**

### FEATURES :

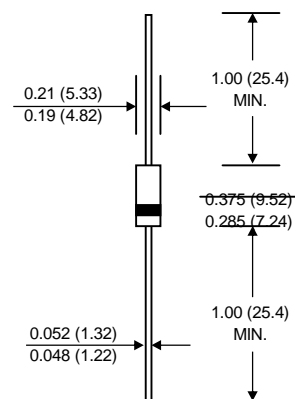
- \* High current capability
- \* High surge current capability
- \* High reliability
- \* Low reverse current
- \* Low forward voltage drop
- \* Pb / RoHS Free

### MECHANICAL DATA :

- \* Case : DO-201AD Molded plastic
- \* Epoxy : UL94V-O rate flame retardant
- \* Lead : Axial lead solderable per MIL-STD-202, Method 208 guaranteed
- \* Polarity : Color band denotes cathode end
- \* Mounting position : Any
- \* Weight : 1.16 grams

## HIGH VOLTAGE RECTIFIER DIODES

### DO-201AD



Dimensions in inches and ( millimeters )

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specified.  
 Single phase, half wave, 60 Hz, resistive or inductive load.  
 For capacitive load, derate current by 20%.

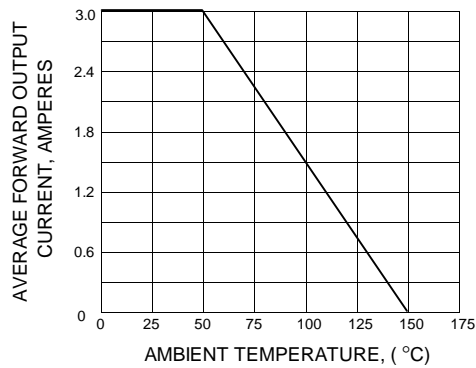
RATING	SYMBOL	HVR312	HVR314	HVR316	HVR318	HVR320	UNIT
Maximum Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	1200	1400	1600	1800	2000	V
Maximum RMS Voltage	V <sub>RMS</sub>	840	980	1120	1260	1400	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	1200	1400	1600	1800	2000	V
Maximum Average Forward Current Ta = 50°C	I <sub>F(AV)</sub>	3.0					A
Maximum Peak Forward Surge Current 8.3ms Single half sine wave Superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	100					A
Maximum Peak Forward Voltage at I <sub>F</sub> = 3.0 A	V <sub>F</sub>	2.2					V
Maximum DC Reverse Current	I <sub>R</sub>	10					μA
Typical Junction Capacitance (Note 1)	C <sub>j</sub>	36					pF
Typical Thermal Resistance (Note 2)	R <sub>θJA</sub>	26					°C/W
Junction Temperature Range	T <sub>J</sub>	- 40 to + 150					°C
Storage Temperature Range	T <sub>STG</sub>	- 40 to + 150					°C

### Notes :

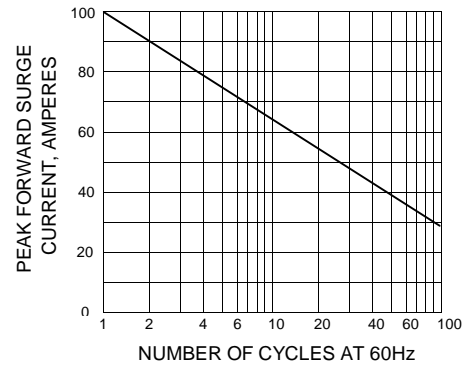
- (1) Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
- (2) Thermal resistance from Junction to Ambient at 0.375" (9.5mm) Lead Lengths, P.C. Board Mounted.

## RATING AND CHARACTERISTIC CURVES ( HVR312 - HVR320 )

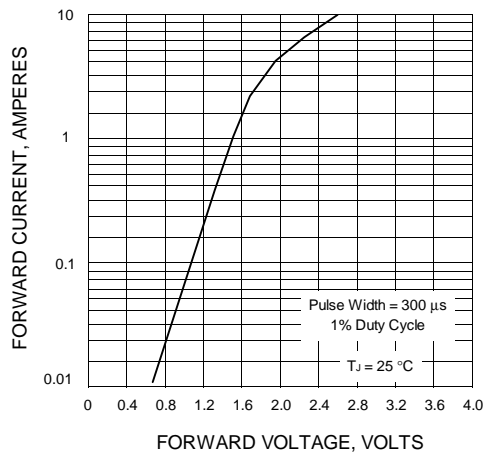
**FIG.1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT**



**FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT**



**FIG.3 - TYPICAL FORWARD CHARACTERISTICS**



**FIG.4 - TYPICAL REVERSE CHARACTERISTICS**

